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Negotiating the Musical Work.
An empirical study on the inter-relation between composition, interpretation and performance

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1 Introduction

In this article we outline the theoretical background for some of the empirical studies performed within the frame of our respective artistic PhD projects at the Malmö Academy of Music, Lund University. The purpose of the studies performed and hence, the requirements of the methods we use to perform them and study their outcome, is to explore the inter-relations between performer and composer. Specifically we study the musical work in the Western art music tradition, prior to its ultimate notation and prior to its performance. Though many of the ideas presented below may apply to other genres this article is mainly concerned with music for solo instrument and live electronics.

Trevor Wishart introduces the idea that the development of notation has, among many other things, resulted in a division of the musician into 'composer' and 'performer' [Wishart, 1985]. This split calls for an extended discussion of what composer and performer provide to the creative process. Our ambition is to approach this issue by studying the low-level processes leading up to a version of the musical work. We find that by using the concept of 'agents' we bypass the otherwise problematic values traditionally assigned to the two labours. The musical work as an open concept, such as it is developed by Lydia Goehr in her book *The Imaginary Museum of Musical Works* (1992), is also central to the reasoning in this paper as well as her claim, that the work concept has had a regulative function only at certain times in the history of Western art music.

In contemporary music this regulative function can be found to be pertinent in one composer's work and extraneous in another's.

2 The Ontology of the Musical Work

A musical work, in the cultural context of the Western art music tradition, and especially since the romantic era up to the present day, is commonly regarded as the result of a process in two distinct phases; one constructive and one reproductive. The composer produces a score, which in turn is handed over to a performer who makes an interpretation of the notation and reproduces it as specified in the score. The score constitutes the primary source of information (see Figure 1).
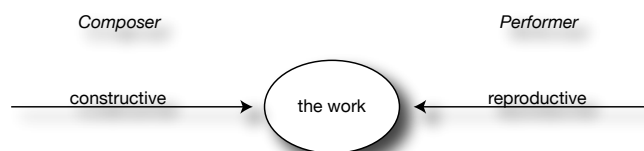

Figure 1: *Within the Western art music tradition the score is commonly regarded as the primary source of information.*

In Paul Ricœur's hermeneutic philosophy, the traditional view of the author as a one-way sender of a message is disputed. Ricœur finds that the author is disengaged from the work by the act of writing [Ricœur, 1991]. When writing takes the place of dialogue, the immediate face-to-face communication is replaced by inscription and the semantic autonomy of the text. The disconnection between the author's intention and the meaning of the text is a key issue in Ricœur's theory. The inscription of a discourse in writing brings the semantic autonomy of language into play.

> The text is the very place where the author appears. But does the author appear otherwise than as first reader? The distancing of the text from its author is already a phenomenon of the first reading that, in one move, poses the whole series of problems that we are now going to confront concerning the relations between explanation and interpretation. These relations arise at the time of reading. [Ricœur, 1991, pp. 109-10]

Suppose that we undertake the hypothetical experiment of applying this theory on the literary text to musical production: are there any analogies between Ricœur's account and musical practice? Imagine music-making, as it takes place independently of musical notation, as compared to the kind of dialogue that the inscription of text replaces. Improvisation involves making variations on known patterns, and when this is successful, truly innovative music comes out. Imagine a composer writing music: Isn't it necessary for him to interact with the musical 'language', or context, in which he is working, in a similar way as is necessary

for the improviser? Analogically speaking, the moment that the composer starts making the notation, the 'dialogue' is replaced by the semantic autonomy of the text-based musical context, with its own structural possibilities and limitations. The composer is detached from the music in the act of notating it. In the case of a written text, the intention of the author is not equal to the meaning of the text. The author is present in the text, but only as a first reader. Similarly, this suggests that the construction of a score-based work consists of dialectic interplay between creation and interpretation, in which the composer - even during the act of writing - has to approach the notation by means of interpretation.

By this reflection on the artistic process, and in the light of Ricœur's philosophy, the view of the composer representing the productive phase, and the performer the reproductive, is questioned. We arrive at a modification of the traditional scheme of construction/reproduction, instead involving construction, but also interpretation in the composer's creative process.
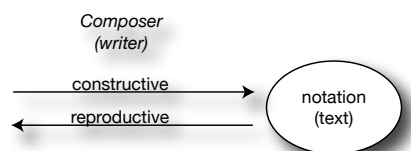
Figure 2: *In the light of Ricœur we arrive at a modified scheme involving construction as well as interpretation in the composer's creative process.*

Another aspect of the composer's practice is highlighted by Horacio Vaggione [Vaggione, 2001]. The composer always has to approach the process of producing a piece of music as a listener, either in the form of inner listening while writing an instrumental score or the concrete listening in the production of a pure electronic piece. This is described by Vaggione as an action/perception feedback loop, reminiscent of the notation/interpretation process suggested by the thinking of Ricœur. But there is a fundamental difference between the two accounts: what Vaggione provides is a theoretical reflection on the kind of thinking that is not based on language, but on action and perception.

> In order to produce music an act of hearing is necessary, whether it be the 'inner hearing' (the silent writing situation) of pure instrumental music composition, or the 'concrete hearing' of electroacoustic music composition. These situations involve variants (there are many others) of an 'action/perception feedback loop' which can be defined as an instance of validation proper to musical processes. [Vaggione, 2001]

Without any further specification, Vaggione hints at the many other variants of this class of feedback loops at play in the production of musical content. It is important to bear in mind that 'thinking' in modes of action does not require a 'transcription' into language. What Vaggione reminds us is that 'thinking through hearing' and 'thinking through performing' are essential modes of interpretation. These involve the physical interaction between a performer and

his or her instrument as well as the inner listening of the composer; both of which do not require verbal translation. This kind of interpretation is what we would call 'thinking through practice'.[1]

Our conclusion is that the use of notation and the subsequent musical practice that has followed from it, does not unambiguously divide composer and performer into one 'auteur' (producing the work) and one interpreter (reproducing it). Interpretation is a part of both creative acts and the practices of both agents overlap in many ways.
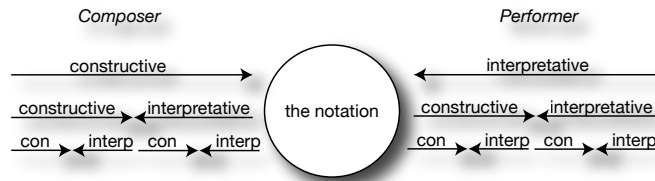

Figure 3: *Our schematic model of the interaction between constructive and interpretative phases in performance and composition.*

2.1 Musical Interpretation and performance

Since the 19th century, performances of score-based works have commonly been referred to as interpretations. If we regard performances as interpretations, are they interpretations of the notation or of a wider entity? This is in essence a matter of the ontology of the musical work: Is the work equivalent to the score or is there more to the identity of the work than notation? According to Theodor Adorno, the "musical score is never identical with the work; devotion to the text means the constant effort to grasp that which it hides..." [Adorno, 1981, p. 144] A crucial fact about musical works is their historicity. Firstly in the sense that the material that is available to the composer is historically and culturally mediated and thus pre-formed within the cultural context in which he is working. Secondly, meaning in music, and in Adorno's view this also equals the musical work itself, is achieved in the tension between the received formal norms and the 'second reflection' or re-contextualisation in the compositional process by the creative 'Subject' [Paddison, 1991]. The work is not equivalent to the score but is a cultural construct that materialises in its relation to its cultural context.

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[1]One important source for the notion of 'thinking through practice' is the thinking of Art historian and curator Sarat Maharaj. His introductory paper for the *Knowledge Lab* at the *Haus der Kulturen der Welt in Berlin* 2005 (in which both authors participated) was entitled 'Thinking Through Performance' and discussed how various modes of 'thinking through' could function as a methodology for the creation of new knowledge in the arts. We believe that the way we use the term in the present paper makes a slightly different use of the notion of 'thinking through': in the *Knowledge Lab*, 'thinking through' referred to a mode of studying artistic practice, whereas we use the notion to describe processes within artistic practice itself. One could argue that our study gives further confirmation to the methodology suggested by Maharaj for the *Knowledge Lab*.

Paul Ricœur introduces the concept of the 'world of the text' as something other than the intention of the author. The meaning of the text is projected in front of the text, and is not to be found in authorial intent 'behind' the text, as in romantic hermeneutic philosophy. What is unfolded by the passing from explanation to understanding is the thing of the text, or the kind of world that the text unfolds before the text.

> Reading is no longer simply listening. It is governed by codes comparable to the grammatical code that guides the understanding of sentences. In the case of the narrative, these codes are precisely the ones that a structural analysis brings to light under the title of narrative codes.
> It cannot, therefore, be said that the passage by way of explanation destroys intersubjective understanding. This mediation is required by discourse itself. I am expressly using the term discourse and not simply speech, the fugitive manifestation of language. For it is discourse that calls for this ever more complicated process of exteriorization with regard to itself, a process that begins with the gap between saying and the said, continues through the inscription in letters, and is completed in the complex codifications of works of discourse, the narrative among others. Exteriorization in material marks and inscription in the codes of discourse make not only possible but necessary the mediation of understanding by explanation, of which structural analysis constitutes the most remarkable realization. [Ricœur, 1991, p. 130]

Not only is the author detached from the work by the act of writing. For a reader to enter into the world of the text, a similar process of detachment and analytical interpretation is needed. But writing music is an activity distinct from writing a literary text. A score, to a higher degree than is a text, is a tacit agreement with a present or implied performer - we cannot simply equal a verbal text to a score and a performer to a reader of this text. But there seems to be an immanent call for analysis and interpretation in the construction of musical meaning. Musical meaning may be found through a movement from explanation through analysis to understanding.

> The performance of a piece of music is (...) the actualisation of an analytic act - even though such analysis may have been intuitive and unsystematic. For what a performer does is to make the relationships and patterns potential in the composer's score clear to the mind and ear of the experienced listener. [Meyer, 1973, p. 29]

From a general point of view, interpretation in the context of the arts can be understood as assigning meaning to works. To what extent can we claim that performances do this? Turning to definitions, we will now attempt to trace the difference between critical interpretation and what we tend to call performance interpretation.

> Being an interpretation of is a relation between a thought or an utterance on the one hand and an object of interpretation on the other. In the case of art (...) an utterance about a work is

> an interpretation of the work, only if it says something about the meaning of a work, about a meaning it could have or was intended to have, or about the work's significance. [Stecker, 2003, p. 82]

Stecker's definition of interpretation raises some important questions: What musical actions do we regard as interpretation, and in what sense do they assign meaning to the work?

Are the performer's shaping of phrases, relative level of dynamics and accents etc. really to be regarded as an interpretation of the piece, assigning meaning to the music? Markings by the composer of dynamics, accentuation, phrasing etc are often regarded as 'interpretative'. This mode of speaking implies that markings of this kind represent the author's interpretation of the meaning of the work. But this seems implausible to us. Isn't it more likely that the reason we tend to regard these markings as interpretational is that they represent a category of musical organisation that often has been left to the performer's discretion? According to our understanding of the musical event all parameters belong to the musical fact.

In the preparatory stages the performer has to make decisions of a kind that do not clearly differ from that of critical interpretation [Levinson, 1993, 38-9]. In order to take a position in cases where a score is incomplete, inconsistent or exists in different versions, a critical interpretation of the score is necessary. This could imply that the difference between critical and performative interpretations is of a floating and unclear kind. On the contrary Levinson argues that they are logically distinct activities.

> ...a critical interpretation typically aims to explain (or elucidate) a work's meaning or structure - "what is going on in it", in a common phrase - whereas a performative interpretation can at most highlight (or effectively display) that meaning or structure. A performative interpretation, if successful, may enable one to conceive of a work differently in the critical sense - as the performer conceived it in arriving at the performative interpretation - but only a critical interpretation indicates or details such a conception. [Levinson, 1993, pp. 38-9]

In other words, there are many ways in which a performance fails to fulfil the criteria for a critical interpretation. In critical interpretation we do not have this peculiar amalgamation of 'object of interpretation' and the 'interpretation' itself. This crucial difference between performance and critical interpretation is also acknowledged by Robert Stecker:

> If performances and critical interpretations are both representations of works, they are so in quite different senses. If we ignore these differences, we can easily be misled to make invalid inferences. Performances are necessarily constructive; that is, they necessarily add features that the work leaves vague or undetermined. [Stecker, 2003, p. 80]

But not only in cases in which the notation is in some respect unclear or vague is there a call for constructive elements in performance. Construction is really at the heart of the matter. The relation between a performance interpretation

and the work is not the relation between an external receiver and an artwork but the relation between different forces at play in the construction of the work itself. The use of notation presumes a common understanding of performance practice of composer and interpreter. This fundamental agreement between a composer and an imagined or present performer is part and parcel of every musical notation. As we have seen in the thinking of Adorno and furthered into the model of 'the world of the text', a true instance of a work must be based on an interpretation that goes beyond the mere text of the score. Assigning meaning to a musical work is achieved by way of a critical reading of the work (and not only the score). Musical meaning is constructed in the relation between the musical structures themselves and the musico-historical context - its tradition - and the friction between this context and the work.

In the preservatory culture that Classical Music is today, we tend to speak of works as ideal objects that are 'interpreted' in performances that can be evaluated in comparison with this ideal entity. However, we find that musical interpretation is better understood as an analytical and hermeneutic tool that is a part of the agencies of the performer as well as the composer. Performances are not separate from the work but always a part of it - a successful performance is an embodiment of the work[2]:

> Every performance is an event, but not one that would in any way be separate from the work - the work itself is what 'takes place' in the performative event.[Gadamer, 1960]

We would like to propose the fairly radical idea of dropping the term performance interpretation. Preceding performance is an act of interpretation, either by means of analytical thinking (critical interpretation) or through an embodied mode of 'thinking through practice'. However, it is important to bear in mind that, just as Gadamer reminds us, a performance is not to be understood as an interpretation of a work, but as its final constructive phase.

3   Musical semiology

In his 1989 article 'Reflections on the development of semiology of music' Jean-Jacques Nattiez offers an excellent review of the history of musical semiology. In it he gives an historic perspective on the fundamental issue of the nature of musical signification. Nattiez distinguishes between intrinsic and extrinsic significations within musical semantics, finding the theory of the former to be to a large extent founded on the work of Nicolas Ruwet and the notion of music as a language that signifies itself [Nattiez, 1989, pp. 30]. Jean Molino summarizes Susanne Langer's idea of music as the 'unconsummated symbol' and captures the essence of the problem: "On the one hand, the unchallengeable presence of evocation; on the other, the impossibility of exploiting it" [Molino, 1990, pp. 126-7]. Molino aims at a theory in which music is understood as networked communication or exchanges between individuals. As we will discuss more thoroughly in the next section, the sender and receiver do not have to come to the same understanding of the message, or the 'trace' as Molino would call it, hence

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[2]This is not to say that performances cannot be more or less true to the instructions in the score, or to the tradition, and that the performance itself should not be accessible for critical consideration.

there is no need for a understanding of the 'code' which is significant to the semiosis favored by Umberto Eco. Eco points to the problems with connecting the investigation of a sign with the object to which it refers. It is impossible to attribute logical statements such as 'true' or 'false' to the semiological investigation of music and for Eco these are pre- or postsemiotic problems; "The signs are of interest to semiotics as social powers" and further "Any attempt to establish the referent of a sign will force us to define this referent with the terminology of an abstract entity." This is what Eco calls the "cultural convention". [Eco, 1971, pp. 61-6]

Defining a cultural context as the referent resolves some issues in the analysis of performed music as a social fact. The listener or concert-goer can be defined as belonging to a cultural entity with predetermined understandings of the context of the performance, but also of the cultural markers within the music. This cultural entity may then be used as a code to decipher the message (the music as a symbolic system). However, in our study we are looking at a not yet existing work - a work in progress - and we are not primarily interested in the symbolic understanding of *music* as it is materialized in the physical world. Our focus is geared towards the understanding of the *actions* that lead to production of musical content. Following Eco's model we might try to approach this symbolic system in relation to a common context, or subculture created by the agents involved in it. Both composer and performer are working within the frame of their own cultural contexts which defines their respective understandings of the evolving work. The subculture is a result of interaction, and negotiation (*'What is it we are developing?'*, *'How are we talking about it?'*, etc.), between the two agents and their inherent cultural contexts. Their mutual expectations and their understanding or imagination of the work in progress is of importance when they attempt at co-ordinating their actions, for instance towards a definition of the performance instructions. The musical work becomes the sign or the message, the agents the signifiers and the subculture the signified. Where, traditionally, we may tend to regard the composer/performer relation as a hierarchic structure in which the role, even the purpose, of the performer is to fulfill the composer's intentions (whether he is dead or alive), this mode of analysis allows us to look at the two agents as part of a larger system that may also contain many other agents.

But to fully understand the dynamics of the context, or subculture as we call it, we also need the tools to move to a lower level of analysis. The tripartite model suggested by Molino for analysis of music, though certain aspects of it remains problematic, appears to be a flexible method for our study at this stage.

3.1   The three dimensions

Molino reminds us that the hypothesis that there is a "single, well-defined item of information to be transmitted, all the rest being simply noise" is "dangerously inaccurate and misleading as soon as we move from the artificial communication of information to a concrete act of human communication as a total social fact." [Molino, 1990] Music, according to him, is a product and not a transmission. The Duchampian notion of a work of art is very similar; as two poles with the artist on the one side and the viewer on the other - the intention of the artist holds no significance to the work's interpretation. Molino further refers to Paul Valéry, to point out that "there is no guarantee of a direct correspondence

between the effect produced by a work of art and the intentions of its creator". The distinction between what was later coined as the 'poietic' and 'esthesic' dimensions in the symbolic phenomenon was first suggested by Valéry in his inaugural lecture for the Collége de France in 1945.

The ambition of musical semiology has been to provide tools for an analytic understanding of the total symbolic fact of the musical work [Nattiez, 1990, pp. 34]. Molino argues for a three level symbolic analysis; "the poietic, the esthesic and the 'neutral' analysis of the object" [Molino, 1990]. Three modes of analysis all representing the same work of art. The analysis at the different levels does not necessarily have to lead to the same conclusions or results but, according to Nattiez, it may help us to understand *all* aspects of the musical work:

> ...recognizing, elaborating, and articulating the three relatively autonomous levels (poietic, neutral and esthesic) facilitates knowledge of all processes unleashed by the musical work, from the moment of the work's conception, passing through its 'writing down', to its performance. [Nattiez, 1990, pp. 92]

Leaving the problematic concept of the neutral level aside[3], a rudimentary definition of the two terms 'poietic' and 'esthesic' from a musicological point of view indicates that an analysis of the (external) poietics of the work takes "a poietic document - letters, plans, sketches" as its point of departure whereas an analysis of the (inductive) esthesic "grounds itself in perceptive introspection" - that which is "perceptively relevant", that which one hears [Nattiez, 1990, pp. 140-3]. The three "families of analysis" correspond to a:

> semiological 'program' [...] that has three *objects*:
>
> 1. the poietic process
>
> 2. the esthesic process
>
> 3. the material reality of the work (its live production, its score, its printed text, etc.) - that is, the physical traces that result from the poietic process.

[Nattiez, 1990, p. 15]

Though the 'material reality' and the 'physical traces' are not as self evidently defined as a result of only the poietics of the work, it is the processes themselves rather than the analysis of the processes that are of interest to us in this paper. (In the study that we performed following the methods developed here it will also be clear that neither the poietics nor the esthesics belong to only one aspect of the work.) The term 'poietic' can be traced to the Thomistic philosopher Étienne Gilson whose definitions are less concerned with the analysis and more with the actual processes. According to Nattiez:

> With 'poietic' Gilson understood the determination of the conditions that make possible, and that underpin the creation of an artist's work - thanks to which something now exists which would not have existed, except for them. [Nattiez, 1990, pp. 12-3]

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[3]It has been extensively debated elsewhere, see footnote 8 of [Nattiez, 1989, p. 35] for a list of references

Taking this short statement as a definition it may be argued that also acts of interpretation (and analysis) involves a poietic dimension.

Nattiez further discusses the issue of where the poietic process ends and the esthesic begins in score-based music (*ibid*, pp. 72). For Nattiez this is in essence an ontological discussion: What is the musical work, is it the graphic sign alone or is the musical work incomplete before it is realised as sound in performance? Contrary to our discussion in Section 2.1, Nattiez finds that the greatest difference, between the score and the acoustic trace left by a performance, is that while the score is "an invariable physical reality" there are just as many acoustic realisations as there are performances. The performance is the borderline between the esthesic and the poietic field. By focusing on the act of interpretation as it is performed between the score and its sonifications ("the interpretants that insinuate themselves between the score and its performance" (*ibid*)), he draws the conclusion that analysis of the neutral level has to be applied to "the graphic sign alone, because that sign *precedes* interpretation" (*ibid*). Where Nattiez sees the production of a musical work as a linear process, we tend to regard it as an oscillating interaction between *all* of the different agents that are involved in the process, though, in this article, we limit the discussion to include only the performer and the composer.

As we suggested in section 2, the process of writing down a musical work *is not* a unidirectional poietic process but should rather be understood as an interaction between esthesic and poietic processes. This to an extent that makes it difficult to define the end of the poietic process as well as the beginning of the esthesic. The acts of musical composition that Nattiez gathers within the poietics can in themselves be analyzed by using the same method that he applies to the total fact of the musical work. According to us, Nattiez gives too little consideration to the generative processes (to repeat the quote: "from the moment of the work's conception, passing through its 'writing down', to its performance" [Nattiez, 1990, pp. 92]), articulating the problem in ontological terms. It seems that Nattiez draws conclusions about "processes unleashed by the musical work" from a purely analytical understanding of music. This perspective is still dependent on the view of composers as 'true creators' and works as 'ideal objects': stable and fixed artworks that should make up the primary object of study for musicology.

What we are concerned with in these studies is almost the opposite: To understand the actions that *lead to* musical content and the significance of the interactions between the agents involved in these processes. A description of the generative phase of musical production preceding notation might provide a better understanding of the nature of the musical work evading the detour into abstract ontological reasoning. Hereby we also avoid the difficult and much debated issue of music as a signifying system.

4   Discussion

> *Just as the reading of the modern text consists not in receiving, in knowing or in feeling that text, but in writing it anew, in crossing its writing with a fresh inscription, so too reading this Beethoven is to operate his music, to draw it (it is willing to be drawn) into an unknown praxis.* [Barthes, 1971]

What we are pointing at in this text is the possibility that not only interpretation (in the sense that Barthes talks about it) is about *operating* the (musical) text. Also composition and the processes unleashed by the 'thinking through hearing', is about operating the inner text of the imagination of the music. Furthermore, we argue that this is an activity that, not only in collaborative projects, is performed in negotiations between multiple agents.

In a study performed by the authors using the theory and method developed in this paper the following conclusions were drawn[4]:

1. Composition may be regarded as a complex interaction between esthesic and poietic processes.

2. Performers may similarly be said to oscillate between these two modes of artistic activity.

By examining one particular event in one of the empirical studies mentioned above we will now try to elaborate on these conclusions and attempt to contextualize the reasoning in section 3.1. The event is taken from a video documented session with Swedish composer Love Mangs and guitarist Stefan Östersjö in which they are working on *Viken*, a composition for guitar and electronics. The session took place less than two months before the premiere of the piece. S.Ö. has improvised and notated a short musical fragment and L.M. is trying to make S.Ö. to shape the melody differently by introducing the notion of a fermata. At this point the roles are seemingly swapped; the performer is notating music and the composer is thinking about the interpretation of this musical fragment.

On his esthesic perception of the melody as it is defined by S.Ö., L.M. presumably wishes for a certain passage to be extended in time. At first his suggestion about the fermata is not clearly understood by S.Ö. The situation and the following communication indicates that L.M. isn't really interested in a fermata in the classical sense - he is merely interested in a different rhythmic contour of the melody. (This confusion is likely to be one of the reasons his message is not being comprehended by S.Ö.)

What follows is a negotiation between the two agents to establish the meaning of the message 'a fermata'. In this process they are both active in the esthesic domain. However, if we move to a lower level of analysis the suggested fermata can be seen as a poietic process introduced by L.M., the meaning of which is being determined by S.Ö. in an esthesic process. The importance here is not, not in this paper nor in the session analyzed, to establish the denotation of the musical term *fermata*. Different musical performance traditions will always hold different signifiers to the idea of the fermata. But to fully understand the signifier of the idea of the fermata in the context of *Viken* as the idea is put forward by Love Mangs, we need to understand what is signified by it independently of the poietic (and esthesic) processes that led to its inclusion, as well as in relation to the (sub)cultural context of the collaboration between S.Ö. and L.M. This is what Eco would call the 'cultural history' and the 'philological aspect' respectively both pointing at the code used to encode the message [Eco, 1971, pp. 154-5]. In this short example it is interesting to note that the receiver as well as the sender is active in working out the code used to encode as well as decode the message ('a fermata'). This 'working out' of the code is

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[4]For an in depth description of the empirical studies performed see [Frisk and Östersjö, 2006].

the process that in effect leads to the abstract definition of the cultural entity, the *subculture*, that becomes the referent of the musical work in question. At the end of this process of negotiation a mutual understanding of the function of the fermata in this specific context is established (which actually goes well beyond the specific meaning of the symbol 'fermata').

This session is also a useful example of how interpretative processes of several kinds overlap and interact. When using improvisation to develop new material it is evident that a greater part of the hermeneutic processes are performed by various modes of 'thinking through practice'. However, as soon as notation is introduced, also analytical modes of thinking make their way into the continuous performing and listening of the two agents.

We suggest that musical interpretation can be divided into two kinds, one based on language and analytical modes of thinking, the other based on thinking-through-practice. According to Ricœur, the act of writing detaches the writer from the meaning of the text and our claim is that this also applies to the act of writing a musical score. Vaggione's notion of action/perception feedback loops captures a characteristic feature of the composer's practice. This kind of 'thinking-through-practice' on the part of the composer may be described as made up of mutually interactive poietic and esthesic processes. We suggest this may be regarded as a hermeneutic process making up a parallel species of interpretation at play in the production of musical content. These various interpretative modes is what we refer to as 'thinking-through-practice'. Finally, the combined efforts of all the agents involved in the construction of the musical work creates the (sub)cultural entity that signifies that work.

From the above discussion of the ontology of the musical work and the function of musical interpretation in the production of musical content we make the following claims:

1. Musical interpretation can be divided into two kinds: 'thinking-through-practice' and analytic (critical) interpretation.

2. Interpretation plays a crucial role in the practice of both the composer and performer.

In this paper we have presented a method for performing studies on the low level processes in the production of musical content. We have showed how the perhaps somewhat dated and endlessly debated semiological terminology by Molino and Nattiez may still prove to be helpful at bridging the gap between disparate activities in the field of musical production. The complex web of actions by several agents in the production of musical content demands that the methods used be flexible and responsive to the multiple layers of musical practice. Though our proposed method needs to be thoroughly evaluated and tested in practice it is our hope that these first steps taken will prove useful for further development.

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